

Chapter 25

ICT for Digital Inclusion: A Study of Public Internet Kiosks in Mauritius

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ABSTRACT

To bridge the digital divide, subsidized access to information and communications technology (ICT) is often provided in less-developed countries. While such efforts can be helpful, their effectiveness depends on targeted users' willingness to utilize the ICT provided. This study examines the factors influencing individuals' use of one such ICT, public internet kiosks, in Mauritius. Findings from a survey indicate that individuals' self-efficacy, perceived ease of use, perceived usefulness, subjective norm, and perceived behavioral control have significant effects. This study contributes to research by highlighting key factors influencing the use of public internet kiosks and discussing how the factors' perception and assessment differ from those in the developed world. Mauritius also provides an interesting context for this study, as her government has been actively promoting the diffusion of ICT in the country yet there have been limited empirical studies on Mauritian and sub-Saharan African users in the digital divide research. Suggestions for promoting the use public internet kiosks in less-developed countries are also provided.

INTRODUCTION

Driven by the rapid growth of the World Wide Web, information and communications technology (ICT) has been integrated into virtually every

aspect of life, redefining the political, economic, social, and work environments. It is widely believed that universal access to ICT will promote economic development, global interaction, and learning that can in turn enhance standards of living and improve social welfare (Dewan &

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Riggins, 2005). However, a large gap still exists between ICT “haves” and “have-nots” in many parts of the world. “ICT haves” refer to those who can access ICT while “ICT have-nots” are socially disadvantaged individuals who have less opportunity to access and use ICT (Lam & Lee, 2006). The gap between these two groups is commonly termed as the “digital divide”. Digital divide was first acknowledged by the United States (U.S.) Department of Commerce’s National Telecommunications and Information Administration in a study that quantified ICT use by various socioeconomic groups (United States Department of Commerce, 1995). It has since been a topic of interest among researchers and practitioners in information system (IS), public administration, and sociology fields (e.g., Lam & Lee, 2006; Sipior et al., 2003), with studies spanning different levels of analysis (i.e., individual, organizational, national), subjects, and methodologies (e.g., case study, survey) (Dewan & Riggins, 2005).

To bridge the digital divide and enhance digital inclusion, it is important to provide the have-nots with access to computers and the internet (Dewan et al., 2010). Public internet kiosks are often set up for this purpose in regions where access to ICT is limited. Public internet kiosks are also known as telecenters, information kiosks, internet access points, community technology centers, and cyber-café’s and they aim to provide subsidized or free ICT access to rural populations (Schware, 2007). For example, in Kenya, the government launched the Pasha project in 2009 for setting up telecenters in rural areas to provide access to computers and the internet as well as computer training (Drury, 2011). In Peru, telecenters were deployed under the ERTIC project (Establecimientos Rurales de Tecnologías de la Información y Comunicación, i.e., rural ICT establishments) to provide farmers access to learning materials on agricultural practices and commerce portals through which they can sell their produce, in addition to basic access to computers and the internet (Heeks and Kanashiro, 2009). In the developed world as well,

Canadian libraries provide public internet kiosks that served as the main point of access for about 8% of Canadians (Umbach, 2004). Although providing ICT access is a necessary first step to narrow the digital divide, it is not sufficient to alleviate the problem as the benefits of ICT can only be reaped when it is accepted and utilized by the targeted users. Further, initiatives to provide ICT access can only be sustainable in the long term if user demand is strong enough for providers to charge fees to cover the costs. It is therefore important to understand the factors influencing individuals’ use of public internet kiosks.

Although there have been many studies examining individuals’ ICT acceptance and use (Schepers and Wetzels, 2007), it is necessary to study the use of public internet kiosks in its own right. Unlike personal computers, public internet kiosks are installed at public locations and shared among many users. For example, in Kenya’s Pasha project, a basic telecentre has three computers while a standard telecentre has five computers and they are typically set up in areas with populations exceeding 5,000 (Drury, 2011). Therefore, issues such as convenience of location, wait time to use the computers, and cost of access are likely to be more prevalent and findings from studies of personal computers may not be directly applicable.

It is also interesting to examine ICT use in developing countries, which have been relatively unexplored in studies of ICT use compared to developed countries (Dwivedi et al., 2008; Mbarika & Byrd, 2009). Developing countries like Mauritius tend to face different constraints in ICT use compared to developed countries. For example, poverty, lack of infrastructure, and low information technology (IT) literacy have been found to be significant limitations that hinder the adoption and use of ICT in developing countries (Shih et al., 2008). These conditions are less prominent in developed countries and research findings and interventions designed in the developed world, therefore, may not be relevant to developing countries.

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